

### Abstract

The present invention relates to an improvement in an apparatus for detecting chemotaxis of cells. It aims at providing a structure for detecting chemotaxis of cells at an elevated accuracy with the use of a microquantity of cells. That is to say, an object of the present invention is to provide an apparatus for detecting chemotaxis of cells by which cell injection and position control can be easily carried out while ensuring the prevention of unexpected migration of the cells definitely positioned in a well or the injected sample so that a stable concentration gradient due to the diffusion of the specimen can be maintained and which ensures further automated operation and controlling.

Namely, an apparatus for detecting chemotaxis of cells with a structure wherein two wells are connected to each other via a channel having resistance to the passage of cells and each well has an opening for injecting cells or a specimen, characterized by having (1) a means of transporting a liquid and a means of stopping the transportation after the injection or the aspiration discharge of the liquid and (2) a means of sealing the opening(s) in one or both of the cell-injection side and the specimen-injection side.